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DASH

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: PATENT APPLICATION OF JOHN CHRISTOPHER STEVENS  
Serial No.: 08/192,471  
Filed: FEBRUARY 7, 1992  
For: CORRECTION TAPE DISPENSER

**CERTIFIED COPY OF PATENT APPLICATION TO ACKNOWLEDGE  
CLAIM FOR PRIORITY UNDER 35 U.S.C. 119.**

The Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Enclosed is a certified copy of the Great Britain Patent Application No. 9401594.8 filed on January 27, 1994. This will acknowledge the claim for priority under 35 U.S.C. 119.

The Commissioner is hereby authorized to charge the appropriate fees, if any, plus any additional fees under 37 CFR 1.16 and 1.17 to Deposit Account No. 07-1350. A duplicate copy of this authorization is enclosed.

Respectfully submitted,

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CERTIFICATE OF MAILING (37 CFR 1.8)

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November 17, 1994  
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*Michele T. Brown*  
MICHELE T. BROWN



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Dated 19th January 1994

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12FEB 1993 00400627 PAT 1.77 UC 25.00

10 FEB 1993

Your reference

JL

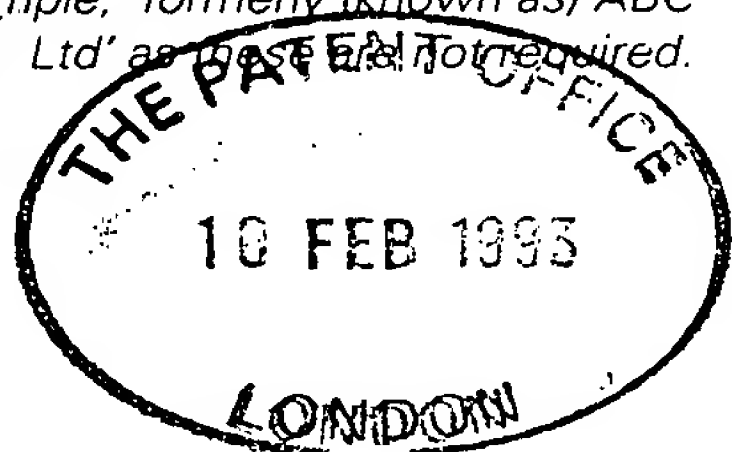
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## Request for grant of a Patent

Form 1/77

Patents Act 1977

### ① Title of invention

1 Please give the title  
of the invention

CORRECTION TAPE DISPENSER

### ② Applicant's details

#### ☐ First or only applicant

2a If you are applying as a corporate body please give:

Corporate name THE GILLETTE COMPANY

Country (and State  
of incorporation, if  
appropriate) U.S.A.  
DELAWARE

2b If you are applying as an individual or one of a partnership please give in full:

Surname

Forenames

2c In all cases, please give the following details:

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Country U.S.A.

ADP number  
(if known)

771279001

**2d, 2e and 2f:** If there are further applicants please provide details on a separate sheet of paper.

☐ **Second applicant (if any)**

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3a Have you appointed an agent to deal with your application?

Yes ☒ No ☐ → go to 3b

↓  
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Agent's name A.A. THORNTON & CO.

Agent's address NORTHUMBERLAND HOUSE,  
303-306 HIGH HOLBORN,  
LONDON,

Postcode WC1V 7LE,

Agent's ADP  
number 75001

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3b If you have not appointed an agent please give a name and address in the United Kingdom to which all correspondence will be sent:

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- ⑦ The answer must be 'No' if:
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  - there is an inventor who is not an applicant, **or**
  - any applicant is a corporate body.

⑧ Please supply duplicates of claim(s), abstract, description and drawing(s).

Please mark correct box(es)

- ⑨ You or your appointed agent (see Rule 90 of the Patents Rules 1990) must sign this request.

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A completed fee sheet should preferably accompany the fee.

## ⑦ Inventorship

7 Are you (the applicant or applicants) the sole inventor or the joint inventors?

Please mark correct box

Yes ☐

No ☒

A Statement of Inventorship on Patents Form 7/77 will need to be filed (see Rule 15).

## ⑧ Checklist

8a Please fill in the number of sheets for each of the following types of document contained in this application.

Continuation sheets for this Patents Form 1/77

—

Claim(s)

2

Description

7

Abstract

—

Drawing(s)

4

8b Which of the following documents also accompanies the application?

Priority documents (please state how many)

—

Translation(s) of Priority documents (please state how many)

—

Patents Form 7/77 – Statement of Inventorship and Right to Grant (please state how many)

—

Patents Form 9/77 – Preliminary Examination/Search

enc

Patents Form 10/77 – Request for Substantive Examination

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## ⑨ Request

I/We request the grant of a patent on the basis of this application.

Signed

A. A. Thornton

Date

10  
(day)

02  
month

93  
year

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4 Agent's or  
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number (if applicable) JL

## ⑤ Claiming an earlier application date

5 Are you claiming that this application be treated as having been filed on the date of filing of an earlier application?

Yes ☐ No ☒ **→ go to 6**

**↓**

***please give details below***

number of earlier application or patent number

 filing date (day month year)

☐ and the Section of the Patents Act 1977 under which you are claiming:

Please mark correct box

15(4) (Divisional) ☐ 8(3) ☐ 12(6) ☐ 37(4) ☐

### ⑥ Declaration of priority

6 If you are declaring priority from previous application(s), please give:

**6** If you are declaring priority from a PCT Application please enter 'PCT' as the country and enter the country code (for example, GB) as part of the application number.

*Please give the date in all number format, for example, 31/05/90 for 31 May 1990.*

Country of filing	Priority application number (if known)	Filing date (day, month, year)
-	-	-

- 1 -

CORRECTION TAPE DISPENSER

This invention relates to a correction tape dispenser for laying down a strip or band of correction composition onto a surface, most usually paper, e.g. to cover markings thereon to facilitate the correct of a mistake.

There are known correction tape dispensers which have supply and take up spools for the tape mounted within a case to rotate about parallel axes with the supply spool being coupled to drive the take up spool through a slipping clutch arrangement. The case may be adapted to be held directly in the hand of the user, or it may form a cartridge which is inserted into a re-usable outer housing. A length of tape extending between the spools is guided to pass out of the casing and around a tip having a relatively sharp edge which is used to press the tape against the surface onto which the correction strip is to be applied. The tape consists of a ribbon, e.g. of plastics or paper, on one side of which is carried a coating of the correction composition, this coating being on the outer side of the ribbon when it passes around the tip. In use, the device is held in the hand and the tip is pressed down onto the paper surface so that its edge presses the tape against the surface across the full width of the tape. The correction composition has an adhesive quality and has greater adhesion to the paper than its

carrier ribbon, so that when the tip is displaced across the paper surface in a direction perpendicular to the tip edge, the tip slides with respect to the ribbon causing tape to be drawn off the supply spool. The consequent rotation of the supply spool rotates the take-up spool so that a substantially constant tension is maintained in the tape and the take-up spool reels in the spent ribbon over which the tip has passed and from which the correction composition coating will have been deposited onto the paper surface. In this way a continuous strip of the correction composition is laid down onto the paper, this strip having a length according to the distance travelled by the dispenser tip.

The known correction tape dispensers operate satisfactorily as far as laying down the correction strip is concerned. However, they do require some practice to ensure that during displacement of the tip its edge is applied correctly against the paper. To a large extent the difficulty of ensuring the correct orientation of the tip is due to the device having to be held in an unnatural attitude, especially when the spools are arranged with their axes parallel to the tip edge.

The present invention addresses this drawback of the prior art devices and provides a correction tape dispenser comprising a tip having an edge for pressing the tape against a surface, a portion of tape between supply and take-up spools being guide to extend around said edge, wherein the edge is inclined to the feed direction in which the tape is guided to the tip, and the tip includes guide means on either side of the edge for redirecting the tape so that the path of the tape around



the edge between the guide means is in a plane substantially perpendicular to said edge and inclined to the feed direction. The tip employed in the dispenser of the invention allows the dispenser to be held in an orientation similar to that in which a writing instrument is normally held, namely inclined forwardly and downwardly away from the person using it. As well as enabling a more natural holding position, the dispenser can allow the tip to be more readily viewed as the case enclosing the spools, and the hand of the user, can be disposed so as not to impede the user's sight of the tip. Thus, the convenience of use of the dispenser may be a substantial improvement on the prior art devices.

Preferably, the guide means comprise linear edges, suitably defined by parallel ridges separated by a slot, around which linear edges the tape extends.

To retain the tape in proper cooperation with the tip edge means, such as a pair of spaced projections may be provided adjacent the edge on one or both sides of the tip. To prevent disengagement of the tape from between the projections an element may extend between them.

A full understanding of the invention will be gained from the following detailed description of an embodiment, reference being made to the accompanying drawings in which:

Figure 1 is a schematic view of a correction tape dispenser in accordance with the invention;

Figure 2 is a perspective view of the dispenser in use, the casing being shown cut away to reveal the tip member;

Figure 3 is a side elevation of the tip member;

Figure 4 is a side elevation of the tip member and also showing the path of the tape to and from the tip edge; and

Figure 5 is a front elevation of the tip member.

The correction tape dispenser illustrated in the drawings has case 1 in which are housed tape supply and take-up spools 2 and 3. The spools are rotatable about their respective parallel axes and as well known in the art the spools are coupled by a slipping drive mechanism (not shown) whereby rotation of the supply spool 2 in response to tape 4 being drawn therefrom causes the take-up spool 3 to rotate to reel in the tape to prevent the tape becoming slack between the spools. The tape itself can be conventional having a layer of correction composition coating one side of a carrier ribbon.

The case is of generally rectangular configuration and is elongated with the spools being displaced relative to each other longitudinally of the casing. Mounted in the casing and protruding from the forward end thereof is a tip member 5, the distal end of which defines an edge 6 by means of which the tape is pressed against the paper surface for transferring a strip of correction composition from the carrier ribbon onto the paper. A length of tape extending between the supply and take-up spools is guided to pass around the tip edge 6. The guide means include posts 7, 8, 9 conveniently provided at the inner or proximal end of the tip member, and cooperating to define a first slot between posts 7 and 8 for prepositioning the tape coming from the supply spool

ready for delivery in a predetermined feed direction to the tip 10, and a second slot between posts 8 and 9 for setting a fixed end position for the tape to pass away from the tip 10 in a predetermined direction parallel to the feed direction, before moving on towards the take-up spool 3. In the illustrated embodiment the feed direction is substantially parallel to the axis of the case 1, which may be desirable, but is not essential.

The tip member 5 is an integral plastics moulding and provides a tip 10 with a first portion and a second portion defining the edge 6 and at an angle to the first position. The first portion comprises two ridges 11, 12 defining parallel rectilinear edges inclined to the tape feed direction. A narrow slot 14 is formed between the ridges. The tape being delivered from the supply spool 2 and extending between the guide posts 7 and 8 enters this slot 14 having twisted through  $90^{\circ}$  in passing from the guide posts to the tip 10 so that the coating of correction composition faces inwardly away from the ridge 11. From the slot 14 the tape passes over the edge of ridge 11, from the inside to the outside surface thereof, and is thereby redirected to extend towards the tip edge 6 in a direction perpendicular to that edge. Having passed around the tip edge, maintaining contact with the tip surface, the tape extends perpendicularly to the edge 6 until it reaches the edge of the ridge 12 around which it then passes before undergoing a  $90^{\circ}$  twist and passing between the guide posts 8 and 10. This path of the tape is clearly depicted in Figures 2 and 4. It will be understood that the correction composition coats the outer face of the tape ribbon as it approaches the tip edge 6 from the ridge 11. Furthermore this ribbon face is also directed away from the surfaces of the ridge 12 so

that there will be no tendency for the tape to stick to the tip 10 even if there are traces of correction composition remaining on the ribbon after it has passed around the tip edge.

On either side of the tip, adjacent the edge 6, are a pair of protruding guide wings 16 to assist in guiding the tap between the ridges 11, 12 and the edge 6. If required a pin 17 may be inserted to extend between the wings on one or both sides of the tip to provide a positive retention of the tape between the wings.

It will be appreciated that the geometry of the tip requires that the angle of inclination  $y$  (Fig. 4) of the ridge edges to the tip edge direction is substantially equal to half the sum of  $90^{\circ}$  and the angle of inclination  $x$  of the tape feed direction to the tip edge direction. As the case 1 is elongated in the tape feed direction, the angle  $x$  is also the "writing angle" of the dispenser, i.e. the angle at which it is held in a downwardly and forwardly inclined orientation in use. A suitable "writing angle" would be in the range of  $45^{\circ}$  to  $75^{\circ}$ , preferably about  $60^{\circ}$ .

For laying down a strip of correction composition, the case of the dispenser may be held comfortably in the hand in essentially the same way as a conventional writing instrument would be gripped, that is mainly between the thumb and forefinger. The dispenser is held so that the tip edge 6 lies flat against the paper surface P, except that the tape 4 is interposed between the tip and the paper. The dispenser is then displaced across the paper in the lateral direction, normal to the tip edge 6, as indicated by the arrow in Figure 2. Under the pressure exerted through the tip, the correction composition adheres to the papers surface and the tip

slides along the tape ribbon causing fresh tape to be drawn from the supply spool 2 and laid down immediately in front of the moving tip while ribbon over which the tip has passed is drawn back into the case 1 and is reeled up onto the take-up spool 3, having left the correction composition previously carried thereby on the paper. Thus, a continuous band of correction composition with a length corresponding to the distance travelled by the tip is laid down without demanding any special dexterity on the part of the person using the tape dispenser.

CLAIMS:-

1. A correction tape dispenser comprising a tip having an edge for pressing the tape against a surface, a portion of tape between supply and take-up spools being guided to extend around said edge, wherein the edge is inclined to the feed direction in which the tape is guided to the tip, and the tip includes guide means on either side of the edge for redirecting the tape so that the path of the tape around the edge between the guide means is in a plane substantially perpendicular to said edge and inclined to the feed direction.
2. A correction tape dispenser, wherein the tip guide means on each side of the edge comprises a linear edge around which the tape passes from one side to the other side thereof.
3. A correction tape dispenser according to claim 2, wherein the linear edges are defined by parallel ridges.
4. A correction tape dispenser according to claim 3, wherein the tape extends to the inner faces of the respective ridges from the supply and take-up spools, respectively.
5. A correction tape dispenser according to any one of the preceding claims wherein retaining means are provided adjacent the tip edge for maintaining the tape in correct cooperation with said edge.

6. A correction tape dispenser according to claim 5, wherein the retaining means comprises a pair of projections which the tape passes.

7. A correction tape dispenser according to claim 6, wherein an element extends between the projections to prevent the tape becoming disengaged therefrom.

8. A correction tape dispenser according to any one of claims 1 to 7, wherein the tip edge direction and the feed direction are at an angle in the range of about  $45^{\circ}$  to  $75^{\circ}$  to each other.

9. A correction tape dispenser according to any one of claims 1 to 8, wherein tape positioning means are provided to determine a firm fixed positions from which the tape passes to the tip in the feed direction, and a second fixed position to which the tape passes after leaving the tip.

10. A correction tape dispenser according to claim 9 wherein the tip is provided by a unitary member and said tape positioning means are attached to said tip member.

11. A correction tape dispenser having a tip substantially as herein described with reference to the accompanying drawings.

12. A correction tape dispenser according to any one of claims 1 to 9, including case enclosing the supply and take-up spools, the case being elongated substantially in the feed direction.

